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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,071	02/18/2004	Michael P. Burke	NTS-102-B	1852

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Thomas E. Bejin
Young & Basile, P.C.
Suite 624
3001 West Big Beaver Road
Troy, MI 48084

EXAMINER	
PHAN, THANH S	

ART UNIT	PAPER NUMBER
2841	

DATE MAILED: 11/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/781,071	BURKE, MICHAEL P.	
	Examiner	Art Unit	
	Thanh S. Phan	2841	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 April 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-54* is/are pending in the application.

4a) Of the above claim(s) *53 and 54* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-52* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *05/10/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election of clams 1-52 in the reply filed on 04/21/06 is acknowledged.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5, 6, 35, 37, 39-43, 46-50 and 52 are rejected under 35 U.S.C. 102(b) as being anticipated by Blount et al. [US 6,205,090].

Regarding claim 35. Blount et al. disclose a secondary clock [14, 16, 18, 20] for use in a clock system [figures 1-2] having a master time keeper [12] for transmitting a control signal carrying time information formatted in one of a plurality of predetermined correction schemes, the secondary clock comprising: a control device [22] configured to receive the correction signal transmitted from the master time keeper, the control device comprising a processor [36] operable for automatically interpreting the correction signal to determine which of the plurality of predetermined correction schemes the master time keeper used to format the control signal; and a time display for exhibiting a time of day, the time display being operable by the control device in response to the control signal transmitted by the master time keeper [column 2, line 56-column 4, line 5].

Regarding claim 37. Blount et al. disclose wherein the secondary clock comprising a motor device [column 3, lines 22-24] operable for changing the time of day

exhibited on the time display, wherein the control device further comprises a motor driver interface in communication with the processor and the motor device, the motor driver interface operable for controlling the motor device in response to a signal received by the motor driver interface from the processor [column 2, line 56-column 4, line 5].

Regarding claim 39. Blount et al. disclose wherein the secondary clock comprising a manual switch input for manually transmitting information to the processor [column 3, lines 51-57].

Regarding claims 40 and 41. Blount et al. disclose wherein the manual switch input is operable between a first state, wherein a correction scheme is enabled, and a second state, wherein the correction scheme is disabled [column 3, lines 51-65].

Regarding claims 42. Blount et al. disclose wherein the control device further comprises: a power and communication translator and filter [32] configured to receive and condition the correction signal transmitted from the master time keeper; and a local device power source [not explicitly numbered] operably connected to the power and communication translator and filter and the processor, wherein the power and communication translator and filter transmits a control signal to the local device power source in response to the correction signal received from the master time keeper and the local device power source adjusts a voltage of the control signal to a predetermined level prior to transmitting the control to the processor [column 3, lines 18-22]

Regarding claim 43. Blount et al. disclose wherein the control device further comprises: a power and communication translator and filter [32] configured to receive

an electrical pulse transmitted from the master time keeper; and a communication interrogation circuit operably connected to the power and communication translator and filter and the processor, wherein the power and communication translator and filter transmits a signal to the communication interrogation circuit in response to the electrical pulse received from the master time keeper and the communication interrogation circuit transmits a notification signal to the processor signaling that power and communication translator and filter has received the electrical pulse from the master time keeper.

Regarding claims 46 and 52. Blount et al. disclose wherein the time display comprises an analog display having a minute hand and an hour hand for exhibiting the time of day [clock 14].

Regarding claim 47.Blount et al. disclose wherein the control device is configured for receiving an encoded signal for use by the processor in determining which of the plurality of predetermined correction schemes the master time keeper used to format the control signal [figure 2; column 2, lines 29-65].

Regarding claim 48. Blount et al. disclose wherein the control device is configured to receive an encoded signal from the master time keeper, the encoded signal carrying information defining the correction scheme used by the master time keeper to format the control signal, wherein the encoded signal is usable by the processor for interpreting the time information being carried by the correction signal transmitted from the master timekeeper [figure 2; column 2, lines 29-65].

Regarding claim 49. Blount et al. disclose a clock system figures 1-3] comprising: a master timekeeper [12] configured to transmit a correction signal carrying time

information formatted in one of a plurality of predetermined correction schemes; at least one secondary clock [14, 16, 18, 20] operably connected to the master time keeper, the secondary clock comprising a control device [22] configured to receive the correction signal transmitted from the master time keeper, the control device automatically operating to determine the correction scheme used to format the time information and to decipher the time information carried by the correction signal based on the determined correction scheme, and a time display for exhibiting a time of day, the time display being controllable by the control device based on the deciphered time information [figure 3].

Regarding claim 50. Blount et al. disclose wherein each of the at least one secondary clocks are connected in series to the master time keeper [figure 1].

Regarding claims 1-3, 5 and 6. The method steps are inherent to the apparatus structures as disclosed above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 36, 44, 45 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blount et al. in view of Shemesh et al. [US 2004/0165480]

Regarding claim 36. Blount et al. disclose the claimed invention except for wherein the control device further comprises a non-volatile memory.

Shemesh et al. disclose a self-correcting clock comprising a non-volatile memory [26].

Since Blount et al. and Shemesh et al. are both from the same field of endeavor, the purpose disclosed by Shemesh et al. would have been recognized in the pertinent art of Blount et al.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify/incorporate the microchip of Blount et al. with the non-volatile memory as teach by Shemesh et al. for the purpose of maintaining logs and/or data in case of a power shortage.

Regarding claim 44. Blount et al. disclose the claimed invention except wherein the control device further comprises: a reset/correction translator and filter configured to receive the correction signal transmitted by the master time keeper, the reset/correction translator and filter operable for determining the polarity of the correction signal; a communication interrogation circuit operably connected to the reset/correction translator and the processor, wherein the reset/correction translator transmits a signal to the communication interrogation circuit identifying the polarity of the correction signal in response to the correction signal received from the master time keeper.

Shemesh et al. disclose a master/slave clock system wherein the system comprising a reset translator [figure 2].

Since Blount et al. and Shemesh et al. are both from the same field of endeavor, the purpose disclosed by Shemesh et al. would have been recognized in the pertinent art of Blount et al.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the reset feature of Shemesh et al. with the system of Blount et al. for the purpose of analyzing the patterns of electrical pulses.

Regarding claims 45 and 51. Blount et al. disclose the claimed invention except wherein the time display comprises a digital display for exhibiting the time of day as a series of numerical numbers.

Shemesh et al. disclose wherein the time display comprises a digital display [4] for exhibiting the time of day as a series of numerical numbers [figure 1].

Since Blount et al. and Shemesh et al. are both from the same field of endeavor, the purpose disclosed by Shemesh et al. would have been recognized in the pertinent art of Blount et al.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate a digital display as teach by Shemesh et al. with the system of Blount et al. for the purpose of digitally displaying time.

Claim 4, 7-34 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blount et al. in view of Shin et al. [US 2005/0152224].

Regarding claim 38. Blount et al. disclose the claimed invention except for a positional sensor in communication with the processor, the positional sensor operable for detecting the time of day exhibited on the time display and transmitting a signal to the processor representing the detected time.

Shin et al. disclose a time indication device comprising a positional sensor [212] for outputting signal to a control unit [figure 2].

Since Blount et al. and Shin et al. are both from the same field of endeavor, the purpose disclosed by Shin et al. would have been recognized in the pertinent art of Blount et al.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate a positional sensor as teach by Shin et al. with the device of Blount et al. for the purpose of transmitting a signal to the control unit.

Regarding claims 4, 7-34. The method steps are necessitated by the apparatus structures as disclosed in the above rejections.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gu et al. [US 5,881,023] ; Singhi [US 4,490,050] ; Zimmer [US 3,469,390] ; Burke et al. [US 5,442,599].

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh S. Phan whose telephone number is 571-272-2109. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tulsidas Patel can be reached on 571-272-2098. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

tsp

/Miska/
Primary Examiner